

7 Intensity, Dimensional and Design Standards

7.1 Residential District Standards (TA 12-01, TA 14-03, TA 18-01, & 21-01)

All development in residential zoning districts shall be subject to the following Intensity, Dimensional and Design Standards. These standards shall not be interpreted as a “guarantee” of development intensity. Other factors and requirements may limit development intensity more than these standards.

Residential Property Standards	R-1	R-2	R-3	R-4
Minimum Lot Area				
Single-Family Detached (sq. ft.)	21,780 [1]	10,890 [1]	5445[1]	3,630 [1]
Single-Family Attached (sq. ft.)	43,560	N/A	10,890 [1]	7,260 [1]
Duplex (sq. ft.)	43,560 [1]	N/A	10,890 [1]	7,260 [1]
Multi-Family (sq. ft.)	N/A	N/A	21,780 [1]	21,780 [1]
Density-Maximum (per acre)	2	4	8 (Single-Family) 10 (Multi-Family)	12 (Single-Family) 20 (Multi-Family)
Minimum Lot Width/ Frontage (ft)	100	80	60	60
Primary Structure				
Minimum Yard Setbacks				
Front Yard (ft) [2]	40	20	20	20
Rear Yard (ft)	25	25	20	10
Interior Side Yard (ft)	10	10	5	5
Street Side Yard (ft)	20	15	15	5
Maximum Height (ft)	35	35	40	50
Accessory Dwelling Units				
Minimum Yard Setbacks				
Front Yard (ft)	50	30	30	30
Rear Yard (ft)	15	15	15	10
Interior Side Yard (ft)	10	10	5	5

Street Side Yard (ft)	20	15	15	5
Maximum Height (ft)	20	20	20	20
Accessory Structure [4]				
Minimum Yard Setbacks				
Front Yard (ft)	50	30	30	30
Rear Yard (ft)	5	5	5	5
Interior Side Yard (ft)	5	5	5	5
Street Side Yard (ft)	20	15	15	5
Maximum Height (ft) [4]	15	15	15	15

[1] The Department of Health is authorized to require a larger minimum lot area when public water and wastewater service is not available or utilized.

[2] See 7.4.5 for setbacks regarding the use of front yard averaging.

[3] No individual accessory structure shall exceed 50 percent of the floor area of the principal dwelling unit on the lot. The total of all accessory structures on a zoning lot shall not exceed 2,000 square feet. With the exception of underground swimming pools, all accessory structures over 500 square feet shall meet the primary structure setback requirements. *(TA 11-01)*

[4] Accessory structures may exceed 15 feet in height, up to the maximum permitted height for the zoning district, provided that the accessory structure meets the primary structure setbacks, *(TA 11-01)*

7.2 Multi-Family Development Standards

The standards contained within the section shall apply to multi-family development projects containing 3 or more units.

7.2.1 Parking and Loading Areas *(TA 18-01) (TA 21-01)*

Off-street parking areas shall be subject to all parking area design, construction and landscaping standards of the Land Development Code and the following requirements.

- Driveway coverage may exceed the size limitations in this section when the subject property is located on a principal arterial and the increase is due to inadequate maneuvering areas for the safe exit of vehicles from the site.
- No driveway providing access to parking or loading areas may exceed 24 feet in width.
- Multi-family developments in excess of one hundred fifty (150) dwelling units shall provide at least two vehicular access points on a public or private street, unless prohibited by the NC Department of Transportation of the City of Hickory due to safety concerns.

7.2.2 Pedestrian Access

Purpose. The pedestrian access standards of this section encourage the creation of a network of safe, consistent, and convenient linkages for pedestrians, including locating building entrances adjacent to the sidewalk.

Pedestrian Connections.

- (1) A comprehensive system of walkways shall link all site entrances, building entries, parking facilities, and common outdoor spaces with the public sidewalk.
- (2) Buildings not directly adjacent to the public sidewalk shall have clearly defined pedestrian connections between the public sidewalk and building entrances.
- (3) Pedestrian connections shall be reinforced with pedestrian scale lighting, bollard lighting, landscaping, accent lighting, or a combination of the foregoing to aid in pedestrian wayfinding. Such lighting shall be subject to the lighting standards of Sec. 9.7

Materials.

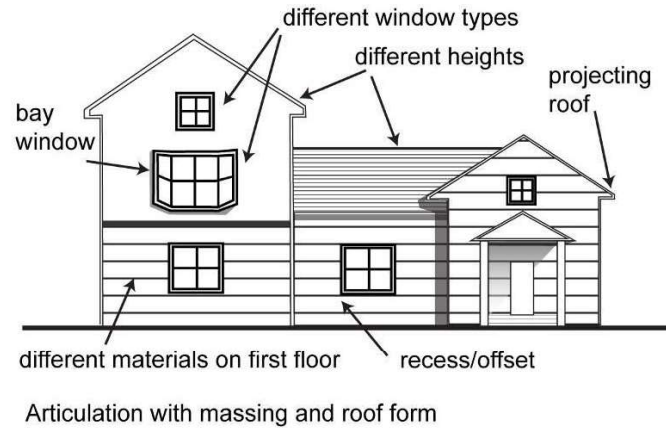
- (1) The pedestrian circulation system must be hard surfaced, and be at least 5 feet wide. The type and nature of the materials used for pedestrian walkways shall be consistent within a development.
- (2) Where the pedestrian system crosses driveways, parking areas, and loading areas, the system must be clearly identifiable through the use of two or more of the following (except where walkways cross vehicular travel lanes):
 - (a) Raised walkway, if a raised path is used, the ends of the raised portions must be equipped with ADA-compliant curb ramps.
 - (b) Special railing, bollards or other architectural features that accent the walkway between the parking bays
 - (c) Special paving, such as concrete or unit pavers in an asphalt area
 - (d) Continuous landscape area, a minimum of three feet wide along at least one side of the walkway. This landscaping may be included as part of the landscaping requirements.

7.2.3 Articulation and Details

Purpose. The purpose of the articulation and details standards for multi-family housing is to avoid building forms that seem bulky and institutional and interrupt the character of single-family development.

Articulation and Detail Standards.

- (1) Buildings shall include articulation along the facades that face streets. Flat blank walls are not permitted.
- (2) Horizontal facades greater than thirty feet shall be articulated into smaller units, reminiscent of single-family residential scale of the neighborhood. At least four of the following methods should be used:
 - (a) Varied building heights
 - (b) Different materials on the first floor
 - (c) Different window types
 - (d) Different colors
 - (e) Offsets
 - (f) Projecting roofs (minimum of twelve inches)
 - (g) Recesses
 - (h) Varied roof forms or orientation



7.2.4 Incompatible Development Setbacks

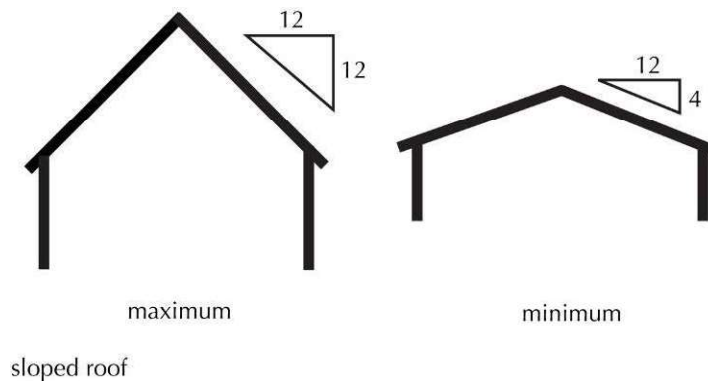
Where multiple family developments abuts existing single-family development, setbacks shall be increased 10 feet per floor for each floor of difference between the two development types. The total setback shall be determined by subtracting the floors of the single-family development from the floors of the multiple family developments and multiplying the result by 10 feet and adding the result to the minimum setback requirement. (e.g. where a three story multiple family structure abuts a single story single-family structures the setback along the abutting property line would be increased by 20 feet.) If a multiple family development abuts two or more single-family dwellings on one side, the single-family dwelling having the lowest height shall be used for determining compliance with this subsection.

7.2.5 Pitched Roofs (TA 18-01)

Multiple family structures adjacent to single-family residential development or located within residential zoning districts, shall incorporate pitched roof forms with slopes between 4:12 and 12:12.

Gables facing the street are encouraged.

Dormers shall be used to break-up roofs in excess of 100 feet. At least one (1) dormer shall be provided for each 50 feet of building length.



7.2.6 Building Orientation

Primary building entries shall be clearly identifiable and visible from the street with well-defined pedestrian routes to building entries. Pedestrian routes shall be consistent with the standards for pedestrian connections established above. Primary entries shall

include windows, a covered porch or stoop and other architectural features consistent with the other sides of the building.

In the case of double frontage lots the rear of the building shall receive the same architectural treatment as the front or shall be treated as a parking area and screened as provided above.

Windows shall be provided on facades facing streets and shall comprise at least fifteen percent of the façade area.

7.2.7 Garbage and Recycling Areas

All exterior garbage cans, garbage collection areas, and recycling areas must be screened from the street and any adjacent properties. Trash receptacles for pedestrian use are exempt. Screening must comply with the screening requirements in Sec. 9.6.

All multiple family developments consisting of more than 10 units and not otherwise receiving recyclable collection services shall provide a recycling and storage area in accordance with the following standards:

- (1) **Access.** Access to the facility shall be paved and shall be designed to accommodate service vehicles.
- (2) **Setbacks.** All recycling facilities shall be setback a minimum of 25 feet from all residentially zoned or used property.
- (3) **Area.** The size of the area for recycling shall be determined by the City Engineer.

7.2.8 Fire Protection

Fire protection shall comply with the requirements of Section 8.11, Fire Protection, of this Land Development Code.

7.2.9 Alternative Standards

The Hickory Regional Planning Commission may approve alternative architectural standards if a finding is made that the proposed alternative meets or exceeds the objectives of this code and is consistent with the objectives of the Hickory by Choice 2030 Comprehensive Plan. Such alternatives shall be approved as a Special Use in accordance with Sec. 2.4.

7.3 Nonresidential District Standards (TA 11-01, 14-01, 16-01, 19-01, & 21-01)

All development in nonresidential zoning districts shall be subject to the following Intensity, Dimensional and Design Standards. These standards shall not be interpreted as a “guarantee” of development intensity. Other factors and requirements may limit development intensity more than these standards.

	NC	CC-1	CC-2	OI	C-1	C-2	C-3	IND
Min. Lot Area (sq ft)	2,500	2,500	10,000	10,000	2,500	15,000	15,000	15,000
Min. Lot Width (sq ft)	50	50	50	50	25	50	50	50
Max. Residential Density (units per Acre)	30	30	30	30	100	30	30	N/A
Max. Non-Residential and Mixed Use Density (Floor Area Ratio)	2	2	2	2 [7]	6	2	2	N/A
Principal Structures – Minimum Yard / Setbacks (ft)								
Front (street)	10	10	20	20	0	20	20	30
Side Corner	10	10	15	15	0	15	15	15
Side	10 [6]	10 [6]	10 [6]	10 [6]	0	10 [6]	10 [6]	10 [6]
Rear	20	20	20	20	0	20	20	20
Side/Rear (adjacent to a residential district)	20/20	15/15	15/20	20/20	20/20	20/20	35/35	35/35
Max. Building Height (ft)	40[1][2]	55[1][2]	40 [1][2]	55[1][2]	100	80[1]	80[1]	80[1]
Accessory Structures – Minimum Yard /Setbacks (ft) [4]								
Front (street)	10	10	20	20	0 [5]	20	20	30
Side Corner	10	10	20	20	0 [5]	15	15	15
Side	5	5	5	5	0	5	5	5
Rear	5	5	5	5	0	5	5	5
Side/Rear (adjacent to a residential district)	20/20	15/15	15/20	20/20	20/20	20/20	35/35	35/35
Max. Building Height (ft)[6]	15	15	15	15	15	15	15	80

[1] For all development within 150 feet of R-1 or R-2 district, the following additional standards shall apply to ensure compatibility: The maximum height for structures at the boundary of the R-1 or R-2 zone is 35 feet. An additional one foot of building height is granted for every two feet of horizontal distance from the R-1 or R-2 zone boundary.

[2] Increased building height, up to 80 feet, may be approved through the issuance of a Special Use Permit.

[3] Except for industrial uses within IND districts, no individual accessory structure shall exceed 50 percent of the floor area of the principal structure on the lot. The total of all accessory structures on a zoning lot shall not exceed 2,000 square feet. All accessory structures over 500 square feet shall meet the primary structure setback requirements.

[4] Except for industrial uses within IND districts, no accessory structure shall be erected or placed between the primary structure and any adjacent street or right-of-way.

- [5] Except for industrial uses within IND districts, accessory structures may exceed 15 feet in height, up to the maximum permitted height for the zoning district, provided that the accessory structure meets the primary structure setbacks.
- [6] The side yard setbacks shown shall not apply when party-walls are utilized in multi-tenant buildings, provided the overall development adheres to all other prescribed setbacks on the developments' external boundary.
- [7] Floor area ratios for colleges, universities, and medical centers may be increased to a FAR of 4.

7.4 Measurements, Computations and Exceptions

7.4.1 Lot Area

Measurement. The area of a lot shall include the total horizontal surface area within the lot's boundaries, not including submerged lands, roadways or rights-of-way.

Multiple Zoning Districts. If a zoning lot includes different zoning districts, the minimum lot area requirements for each district shall be met.

7.4.2 Lot Width

Minimum lot width shall be measured between side lot lines along a line that is parallel to the street lot line or its chord. Measurements of lot width shall be made at the minimum street setback line. When a lot has more than one street setback line, lot width shall be measured along the street setback line with the narrower width. In all cases, the width between side lot lines at their intersection with street lot lines shall be at least 25 feet.

7.4.3 Density (TA 18-01)

Residential

- (1) **Measurement.** Maximum density refers to the maximum number of dwelling units allowed per acre of site area.
- (2) **Calculation.** To calculate the number of dwelling units allowed on a parcel, multiply the acreage by the maximum density standard of the zoning district, with the understanding the actual density may be reduced due to infrastructure construction, and site development related items.
- (3) **Rounding.** When density calculations result in fractions, fractions of 0.5 ($\frac{1}{2}$) or greater shall be rounded to the next highest whole number; fractions of less than 0.5 shall be rounded down to the next lowest whole number.

Non-Residential and Mixed-Use (TA 18-01) (TA 19-01)

- (1) **Measurement.** Maximum density refers to the maximum amount of floor area allowed per acre of a development site. For non-residential and mixed-use development, maximum floor area is expressed by floor area ratio (FAR).
- (2) **Calculation.** To calculate the floor area allowed on a parcel, the total acreage is multiplied by the maximum floor area ratio of the zoning district, with the understanding the actual density may be reduced due to infrastructure construction, and site development related items.
- (3) **Rounding.** When density calculations result in fractions, fractions of 0.5 ($\frac{1}{2}$) or greater shall be rounded to the next highest whole number; fractions of less than 0.5 shall be rounded down to the next lowest whole number.

7.4.4 Setbacks (TA 21-01)

Measurements. Setbacks refer to the unobstructed, unoccupied open area between the furthestmost projection of a structure and the property line of the lot on which the structure is

located. Setbacks shall be unobstructed from the ground to the sky except as specified in this subsection.

Street Setbacks. Street setbacks shall extend the full width of a lot and shall be measured from the street lot line. In the event a property line extends to the middle or into part of a roadway, the front setback shall be measured from the lines shown on the applicable county tax maps.

Side Setbacks. Side setbacks shall extend from the required street setback line to the required rear setback line and be measured from the side lot line. If no street or rear setback is required, the required setback area shall run to the opposite lot line. Side setbacks on through lots shall run the full length between street lot lines.

Rear Setbacks. Rear setbacks shall extend the full width of the lot and be measured from the rear lot line. If a corner lot has more than 4 sides, the yards along the interior lot lines that do not intersect a street line shall be considered rear yards.

Special Yards. A special yard, for purposes of these regulations, shall be construed as a yard other than adjacent to a street, required to perform the same functions as a side or rear yard, but adjacent to a lot line so placed or oriented that neither the term, "side yard" nor the term, "rear yard", as generally determined, defined or applied with respect to regular lots, fits the circumstances of the case. In such instances, the special yard shall be considered a rear yard unless the Planning Director determines that side yard requirements of the district shall apply because of the relationship of the portion of the lot on which the yard is to be located to the adjoining lot or lots, with due regard to the orientation of structures and buildable areas thereof.

Waterfront Yards

- (1) Waterfront yards are yards adjacent to waterways that are 50 feet or more in average width adjacent to the yard. Lots having one or more such waterfront yards shall be considered waterfront lots.
- (2) Where a waterfront yard is required on a lot, the requirement shall be construed as replacing yard requirements otherwise applicable to the portion of the lot involved.
- (3) Depth of required waterfront yards shall be measured perpendicular to the actual waterfront line, provided, however, that in the case of irregularities in such line, such projections, curves or chords may be used as are reasonably necessary to achieve a regular outer boundary for the yard, as well as reasonable in relation to the general pattern of waterfront yards on adjoining lots.
- (4) The minimum required depth for waterfront yards shall be 35 feet, provided that the lot width may be measured at the rear setback line. Boathouses, gazebos, docks, pier structures, davits and similar structures may occupy up to 30% of the required waterfront yard.

Projections/Encroachments. The following features may project in required setbacks to the extent indicated.

- (1) Architectural features, such as, but not limited to, cornices, chimneys, eaves, stoops and gutters, may project no more than 3 feet into the required street setback, 5 feet into the required rear setback and 2 feet into the required side setback.
- (2) Mechanical equipment, such as air conditioning units, heat pumps, heating equipment, solar panels, and similar installations, may not project into the required street setback, but may project 5 feet into the required rear setback and 2 feet into the required side setback.
- (3) Structural or mechanical devices added to make such structures accessible to physically disadvantaged persons may encroach into required setbacks and buffers.
- (4) Unenclosed porches and decks may encroach into the required front and/or rear yard for a distance of not more than 20% of the required setback. For the purpose of this section, a porch or deck enclosed in wire screen, or similar material, shall not be considered an enclosed porch or deck.

7.4.5 Setback Averaging

Where the average of the street setbacks for all lots located within 50 feet of either side of a lot is less than the minimum required front setback, the required setback line may be reduced to this lesser average depth, but in no case, to less than 10 feet. For the purpose of computing such average, a vacant lot shall be considered as having the minimum street setback required for the zoning district.

7.4.6 Setbacks along Thoroughfares. (TA 18-01)

When development of parcels along roadways shown for future improvement in the adopted thoroughfare plan occurs, consideration should be given to provide for additional setback along such roadways to accommodate the outlined future improvements.

7.4.7 Building Height (TA 19-01)

Measurement. Building height shall be measured as the vertical distance from the mean elevation at the finished grade along the front of the structure to the highest point of the structure or to the highest point of a flat or mansard roof or to the mean height between the eaves and ridge for a pitched roof in the case of buildings.

Exceptions. Except as specifically provided herein, the height limitations of this Land Development Code shall not apply to any roof structures for housing elevators, stairways, tanks, ventilating fans, solar energy collectors, or similar equipment required to operate and maintain a building, provided that such structures shall not cover more than 33% of roof area or extend over 10 feet in height; nor to church spires, steeples, belfries, cupolas, domes, monuments, water towers, skylights, vents, construction or mining cranes or draglines, or similar structures, which may be erected above the height limit, nor to fire or parapet walls provided, however, that such walls shall not extend more than 5 feet above the roof.

Aviation Hazards. No building or other structure, regardless of the height exceptions set forth in this subsection, shall be located in a manner or built to a height that constitutes a hazard to aviation or creates hazards to persons or property by reason of unusual exposure to aviation hazards.

Tall Structures. Unless expressly stated otherwise elsewhere in this Land Development Code, towers that are principal structures in themselves, such as high voltage transmission line towers, grain elevators, silos and other such agricultural uses and similar principal structures, may only exceed the height limitations established for the district wherein they are proposed for relocation following review by the Planning Commission as a Special Use Permit in accordance with this Land Development Code. A zoning compliance permit may only be granted where the Planning Commission finds:

- (1) That the proposed structure would not result in restriction or interference with air traffic or air travel to or from any existing or proposed airport.
- (2) That the proposed structure is consistent with the existing surrounding uses, and is compatible with the existing neighborhood development.
- (3) That the proposed structure is consistent with the Hickory by Choice 2030 Comprehensive Plan.
- (4) That the proposed structure is not detrimental to the existing or proposed use of any neighboring property, and does not unreasonably restrict the free flow of light, sunlight and air to those properties.